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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,844	04/09/2004	Tetsuro Yamate	030486	8680
38834	7590	06/30/2006	EXAMINER	
WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036			METZMAIER, DANIEL S	
			ART UNIT	PAPER NUMBER
			1712	

DATE MAILED: 06/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/820,844

Applicant(s)

YAMATE, TETSURO

Examiner

Daniel S. Metzmaier

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 9 April 2004; & 9 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9/9/2005</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

Claims 1-4 are pending.

#### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Specification***

2. The disclosure is objected to because of the following informalities: the acetic anhydride structure on page 3 of the instant specification should provide the double bond between the carbonyl carbon and oxygen.

The structure of ethylene glycol monobutyl ether acetate on page 8 needs correction of the oxygen to carbon. Please contrast the structure with the diethylene glycol monobutyl ether acetate at page 9, line 1.

Appropriate correction is required.

#### ***Claim interpretation***

3. The claims employ the language: "including" and "containing". Said terms have been interpreted to have the same scope as "comprising". See MPEP 2111.03. It is noted that none of the claims define any concentrations.

#### ***Claim Objections***

4. Claims 1-4 are objected to because of the following informalities: the claims do not comply with 37 CFR 1.75(i). Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 1712

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are directed to compositions in product-by-process format wherein the oxalate and fluorescent material are mixed with the hydrogen peroxide to induce chemiluminescence. Claims 3 and 4 are directed to the peroxide component of the chemiluminescent composition.

It is unclear whether applicants intend the chemiluminescing composition as a single part and/or component composition or a two part composition having part (1), the oxalate and fluorescent material in solvent and part (2), peroxide in solvent.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Omniglow Corporation, WO 94/19421. Omniglow Corporation (examples, tables and claims) discloses the use of cetyl citrate esters with benzoates (WO '421, claims 1 and 6).

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1712

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Omniglow Corporation, WO 94/19421, as applied to claims 1-2 above, and further in view of Zweig et al, US 3,729,426; Roberts et al, US 3,701,738; and/or Crigg, US 3,560,395. Omniglow Corporation (examples, tables and claims) discloses the use of cetyl citrate esters with benzoates (WO '421, claims 1 and 6).

Omniglow Corporation differs from claims 3 and 4 in the use of ethylene glycol monoalkyl ether acetate or diethylene glycol monoalkyl ether acetate in claim 3 or ethylene glycol monobutyl ether acetate (also known as Butyl CELLOSOLVE® acetate) or diethylene glycol monobutyl ether acetate (also known as Butyl Carbitol acetate) in claim 4 for the use of phthalate esters in the activator solution.

Omniglow Corporation (page 4, lines 17-22) disclose the phthalate free activators solutions employ solvents that possess good peroxide solubility.

Zweig et al (abstract; column 7, lines 36 et seq; and column 9, lines 1-23) and Roberts et al (abstract; column 5, lines 34; and column 6, lines 4-25) disclose chemiluminescent compositions and suitable solvents therefore. Zweig et al (column 7, line 43; and column 9, lines 1-5 and 16-23) and Roberts et al (column 5, line 40; and column 6, lines 4-8 and 18-24) disclose the use of ethylene glycol monoalkyl acetate as typical solvent employed in the chemiluminescent system as well as ester solvents taught in the Omniglow reference as suitable solvents.

Crigg discloses aqueous peroxide compositions. Crigg (column 4, lines 18 et seq) discloses organic liquid solvents that may be employed in the peroxide solutions include t-butyl alcohol, ether-ester solvents including methyl "Cellosolve" acetate (ethylene glycol monomethyl ether acetate, also known as 2-methoxyethyl acetate), Butyl "Cellosolve" acetate, and Butyl "Carbitol" acetate among other solvents common to Omniglow Corporation, Zweig et al, and the Roberts et al references.

These references are combinable because they teach chemiluminescent compositions and solvents therefore. It would have been obvious to one of ordinary skilled in the art at the time of applicants' invention to employ t-butyl alcohol with conventional ether-ester solvents including methyl "Cellosolve" acetate (ethylene glycol monomethyl ether acetate, also known as 2-methoxyethyl acetate), Butyl "Cellosolve" acetate, and/or Butyl "Carbitol" acetate as obvious functional equivalent solvents in the Omniglow Corporation activator solutions for the advantage of producing a phthalate free peroxide activator solution.

Since the solvents were known in the art for use in either chemiluminescent systems and/or in conventionally known peroxide compositions, it would have been obvious to one having ordinary skill in the art at the time of applicants invention to employ said solvents as suitable solvent and/or diluents in the Omniglow Corporation peroxide activator solutions. While applicant's examples show the particular solvent system functions, applicant examples do not show the activator compositions to have unexpected properties. It is further noted that the claims are absent of any concentrations and would not exclude the use of mixtures, which at least the Omniglow

Art Unit: 1712

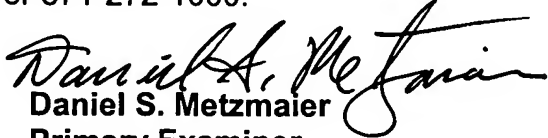
reference clearly contemplates. Said claims would require only small amounts of the art disclosed solvents.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Metzmaier whose telephone number is (571) 272-1089. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Daniel S. Metzmaier  
Primary Examiner  
Art Unit 1712

DSM